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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,125	06/15/2001	Assaf Govari	BIO-121	8635

27777 7590 03/25/2005
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EXAMINER

PATIDAR, JAY M

ART UNIT	PAPER NUMBER
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2862

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 09/882,125	Applicant(s) GOVARI, ASSAF	
	Examiner Jay M. Patidar	Art Unit 2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. This communication is in response to applicants' amendment filed on March 4, 2005.

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection.

Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on March 4, 2005 has been entered.

3. Claims 1,20 are objected to because of the following informalities:

In claims 1,20, it is unclear as to how the position sensor signals determine temperature at the position sensor; how a signal processor is adapted to determine the temperature of the position sensor;


Appropriate correction is required.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior

art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10,19-30,39,42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants admitted prior art in view of Dlugos (6,229,300) and Adler et al. (5,381,090).

 As to claims 1-~~10~~³,19-23,39,42-44, Applicants admitted prior art discloses a medical device comprising a body; a position sensor having a core; a winding circumferentially positioned around the core and a signal processor processing the signal from the position sensor to determine the location or orientation coordinates of the sensor (Note pages 1-4 of the specification). Applicants admitted prior art fails to show a core made of a Wiegand effect material and measuring the temperature from the resistance of the winding. Dlugos and Adler are cited to show these features. Dlugos discloses a Wiegand wire for determining the position of the object wherein the Wiegand wire having a core and shell portion. Dlugos discloses a position sensor wherein the coil 22 is wound around the Wiegand wire that generates the position dependent output signal (Note Figs. 1-3). Adler is cited to show that it is known in the magnetic field art to determine the temperature from the resistance of the winding since temperature is dependent on the resistance of the coil (Note col. 2, lines 32-42).

Consequently, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of applicants admitted prior art in view of Dlugos and Adler to have included a core made from Wiegand material to provide the kind of switching response to the threshold magnetic field that produces a uniform and repeatable output pulse from a pickup coil to determine the position of the object and to measure the temperature of the sensing device.

As to claims 4-10,24-30, AAPA discloses a typical small probe for medical device for determining the position (col. 1, lines 20+) that could determine position in mm range. Discovering the optimum range would be within the level of ordinary skill in the art. One ordinary skill in the art would make size of the position sensor as small as possible since such device is used for medical purposes so that such device is inserted into a patient. Dlugos discloses the winding being attached to the core (e.g. 52 in fig. 3).

5. Claims 11-18,31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, Dlugos, Adler in view of Wiegand (4,247,601).

As to claims 11-17,31-37, the combination of AAPA, Dlugos and Adler discloses the position sensor as described above except for the materials of

core and coil. Wiegand teaches that the materials of core for the Wiegand effect sensor e.g. Vicalloy are very well known in the art for its use as a switching element. The materials copper, cobalt, vanadium, iron etc. are known in the art. The use of such materials would inherently result in the sensor having the properties as set forth in claims 11-17. An artisan would be motivated to use such material since it involves merely the selection of a known type of materials for the core in the sensor.

As to claims 18,38, the references as set forth above do not explicitly disclose that the sensing coil wire is copper winding. The sensing coil made from copper is known in the art (see US 4,437,963).

6. Claims 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, Dlugos, Adler in view of Normann (4,639,670).

As to claims 40-41, AAPA, Dlugos and Adler in combination discloses that it is well known in the art to provide a medical device with a position sensor where the position sensor can determine position and orientation coordinates. They fail to show the materials of the core. Normann discloses that it is well known in the art to use copper, nickel, iron alloy or iron, cobalt as the material for a magnetic field sensor (col. 2, lines 30+). It would have been obvious to one skilled in the art to have modified the prior arts such that the material used in the

magnetic field sensor is a copper, nickel, iron alloy or an iron, cobalt alloy or alternatively iron, chrome and cobalt. Such a modification merely involves the substitution of one known type of material used in a magnetic sensor for another. Furthermore, it would have been obvious to have these materials for the core of the sensing device because they are highly permeable and highly mechanically flexible materials and are widely utilized as core material for the magnetic field sensing device.

7. Applicant's arguments filed March 4, 2005 have been fully considered but they are not persuasive.

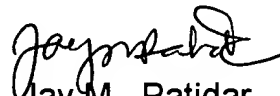
8. In response to applicant's argument that Dlugos and Adler are nonanalogous arts, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both references are directed to magnetic field measuring apparatus. Therefore, one of ordinary skilled in the art would look at any type of position sensors in any type of environment e.g. medical field in order to solve the problem. In response to applicant's

argument regarding the field of endeavor i.e. medical device, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay M. Patidar whose telephone number is 571-272-2265. The examiner can normally be reached on M-Thur 7:00-5:30.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jay M. Patidar
Primary Examiner
Art Unit 2862
March 19, 2005